



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

August 31, 2009

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

SUBJECT: Final Environmental Impact Statement for a New Major License for the Catawba-Wateree Hydroelectric Project, FERC Project No. P-2232-522 in Alexander, Burke, Caldwell, Catawba, Gaston, Iredell, Lincoln, McDowell, and Mecklenburg Counties, North Carolina; and Chester, Fairfield, Kershaw, Lancaster, and York Counties, South Carolina; CEQ Number 20090258

Dear Secretary Bose:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Final Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The Federal Energy Regulatory Commission (FERC) proposes to approve a major new license for the Catawba-Wateree Hydroelectric Project, FERC Project No. 2232 (Project). The Project is located in the Catawba-Wateree River Basin in Alexander, Burke, Caldwell, Catawba, Gaston, Iredell, Lincoln, McDowell, and Mecklenburg Counties, North Carolina; and Chester, Fairfield, Kershaw, Lancaster, and York Counties, South Carolina. Duke Energy Carolinas, LLC (Duke Energy) owns and operates the Project. The current license was issued in 1958 and expired on August 31, 2008. On August 29, 2006, Duke Energy filed an application with FERC for a new license under Part I of the Federal Power Act to continue operating its existing Project. In the interim, FERC issued an annual license, which will continue (renewed on an annual basis) until FERC has made a decision on a new license.

Three alternatives were evaluated in the Final EIS: 1) the no action alternative (continued operation as required by the existing license); 2) Comprehensive Relicensing Agreement (CRA), including conditions developed by Duke Energy in cooperation with a number of public and private stakeholders; and 3) FERC staff-recommended alternative. The FERC staff alternative, which includes the CRA conditions and some additional modifications, is the preferred alternative.

In our comments on the Draft EIS, EPA requested to be involved in the development and implementation of the Flow and Water Quality Implementation Plan (FWQIP) and the Water Quality Monitoring Plan (WQMP). On Page 131 of the Final EIS, FERC recommended inclusion of EPA in the consultation list for the FWQIP and to receive monitoring results during the license period. However, this recommendation is not included as part of the description of the staff-recommended alternative. EPA has a role in addressing these water quality issues.

Although water quantity allocations (i.e., flow) are generally issues of state law, “water quantity is closely related to water quality; a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, be it for drinking water, recreation, navigation or, as here, as a fishery.”¹ Therefore, EPA requests that the Record of Decision and License Order include a specific measure that Duke Energy should consult with EPA on the implementation of the FWQIP and WQMP and to receive copies of the annual monitoring report verifying compliance with applicable water quality standards. A comparable example would be what was included for the National Oceanic and Atmospheric Administration National Marine Fisheries Service for the Maintenance and Emergency Protocol in the staff-recommended alternative.

EPA’s primary issue raised in the review of the Draft EIS was concern related to water quality in Project dam releases, particularly dissolved oxygen (DO) levels, from the Bridgewater development. EPA appreciates inclusion in the Final EIS of an updated description of the applicable trout water quality standards in the Catawba River below the Linville dam. As stated in the Final EIS, the current DO standards for the Catawba River at the point that the water is released from the Bridgewater powerhouse are 4.0 mg/l minimum instantaneous and 5.0 mg/l minimum daily average. The Final EIS also correctly reflects the application of the revised standards for trout usage at a point 0.6 mile upstream of Muddy Creek’s confluence with the Catawba River, at which point the DO levels must not be less than 6.0 mg/l at all times. However, the Final EIS states that the trout standards “do not apply until approximately 1 mile downstream of the Bridgewater powerhouse.” Upon further analysis by EPA, including a site visit, it appears that the confluence of the Catawba River and Muddy Creek is approximately one mile downstream of the Linville dam. Therefore, it appears that the trout standards apply at a distance of less than one mile downstream of the Bridgewater powerhouse. This location is approximate due to the complex nature of the confluence of Muddy Creek and the Catawba River.

EPA’s main concern with this Project continues to be that discharges from the Linville dam do not cause a violation of downstream trout water quality standards. North Carolina Water Quality Certification Rules (15A NCAC 02H .0506) state that, “The Director shall issue a certification upon determining that existing uses are not removed or degraded by a discharge to classified surface waters for an activity which...(4) does not result in cumulative impacts, based upon past or reasonably anticipated future impacts, that cause or will cause a violation of downstream water quality standards.” When the North Carolina Division of Water Quality (NCDWQ) issued the Clean Water Act (CWA) Section 401 water quality certification for this project on November 14, 2008, these new standards were not in place. Therefore, the need to consider the impact of Duke Energy’s operations on these different downstream standards was not part of the NCDWQ review of Duke Energy’s Section 401 application. By copy of this letter, EPA requests that NCDWQ consider this issue in the context of the current Section 401 certification to ensure the Project’s compliance with all applicable water quality standards.

¹ See PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology (92-1911), 511 U.S. 700 (1994).

Duke Energy is proposing to build a new powerhouse at the Linville dam that will include DO aeration capability on all units sufficient to meet any applicable DO standards now and in the future. Duke Energy also proposes to install a new flow valve with aerating capability that would support new minimum flow releases into the Catawba bypassed reach that would flow into the Catawba River at Muddy Creek. Since the Bridgewater powerhouse is proposed to have significant aeration capabilities installed as part of improvements described in the Final EIS, Duke Energy will have the capability to meet any applicable DO standards and should utilize these capabilities as conditions require. Other than a commitment to install this technology to meet DO requirements, there are no specific operating protocols in Duke Energy's license application, the CRA, or Section 401 application/certification that specify when this technology would be used or that might preclude the utilization of this technology to meet these standards.

In reviewing the final Section 401 water quality certification issued by NCDWQ, there is an expectation that the Project will not result in a violation of the applicable water quality standards and discharge guidelines. Even though these new standards were not in place at the time of certification, the certification and the CWA require Duke Energy to meet all applicable water quality standards in its immediate discharges and to not contribute to the violation of downstream water quality standards. Therefore, EPA recommends that the Record of Decision and License Order include a statement that Duke Energy should meet all applicable water quality standards, including the protection of the designated trout use applicable 0.6 mile upstream of Muddy Creek's confluence with the Catawba River, and requiring DO levels of not less than 6.0 mg/l at all times. Duke Energy currently has proposed a monitoring location for compliance that is in approximately the same location as the point at which the trout standard applies. EPA recommends that this compliance location would be an appropriate monitoring point at which to determine compliance with the downstream trout water quality standards.

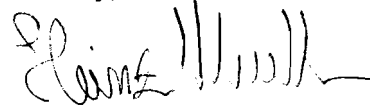
EPA also offers a technical correction to information included in the Final EIS related to the description of proposed stream flow mitigation. In Appendix D, Comment Response Matrix, there are several comment responses that state "...determination of the amount of mitigation is based on precedence in guidelines developed by the US Corps of Engineers, EPA and NCDWQ (2003)." The reference in the literature cited section of the Final EIS is to "*Stream Mitigation Guidelines*" developed by the U.S. Army Corps of Engineers (USACE) Wilmington District, EPA, NCDWQ and North Carolina Wildlife Resources Commission in 2003. These guidelines identify mitigation requirements as part of issuing USACE permits under CWA Section 404. It is important to note that this guidance may or may not be applicable for use in Section 401 certifications without Section 404 permits. Regardless, the 2003 *Stream Mitigation Guidelines* were not utilized for this project. The actual guidelines that were followed to determine stream flow mitigation for the Catawba-Wateree project was internal, draft NCDWQ stream mitigation guidance for FERC-related 401 certifications dated January 2007. This guidance was neither developed nor approved by EPA. The use of this policy for projects such as this has been recently brought to EPA's attention, and the policy is currently under review.

Finally, EPA has learned that the South Carolina Board of Health and Environmental Control (Board) denied the Section 401 certification for discharges from this project in the state of South Carolina. We understand that Duke has petitioned FERC for a declaratory judgment finding, among other things, that South Carolina Department of Health and Environmental

Control (SCDHEC) waived certification since the certification had not been finalized in a timely manner. Since SCDHEC had issued the certification in the time frame allowed under the CWA, EPA believes it did not waive certification. The fact that it was challenged and did not take effect is not relevant. Further, given the action of the Board, there is no valid section 401 certification from SCDHEC for this project and FERC cannot issue the license until such time that SCDHEC either issues a certification or waives certification.

In summary, while we continue to have concerns that the proposed action has the potential for impacts to aquatic species in the Catawba River below the Bridgewater development, EPA supports the environmental protection measures and monitoring programs as described in the Final EIS. We appreciate the opportunity to review the proposed action. Please contact Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

cc: U.S. Environmental Protection Agency, Region 4 Water Protection Division
U.S. Fish and Wildlife Service, Asheville Field Office
U.S. Fish and Wildlife Service, Charleston Field Office
NOAA National Marine Fisheries Service
North Carolina Division of Water Resources
North Carolina Division of Water Quality
North Carolina Wildlife Resources Commission
South Carolina Department of Natural Resources
South Carolina Department of Health and Environmental Control
Duke Energy Carolinas, LLC